

Figure 1

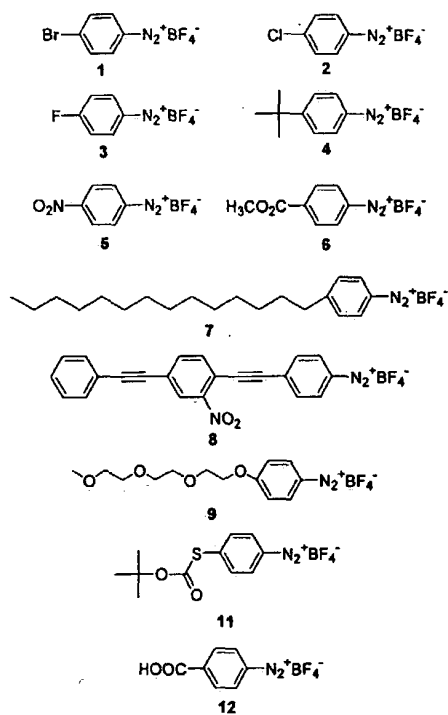
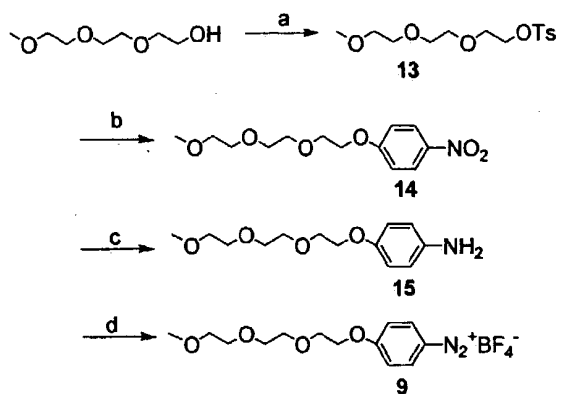


Figure 2



a) TosCl, H<sub>2</sub>O, THF b) 4-nitrophenol, DMF, K<sub>2</sub>CO<sub>3</sub> c) H<sub>2</sub>, Pd/C d) NOBF<sub>4</sub>, CH<sub>3</sub>CN

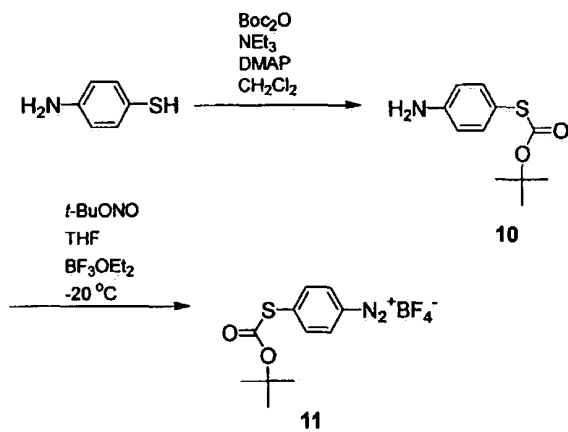


Figure 3

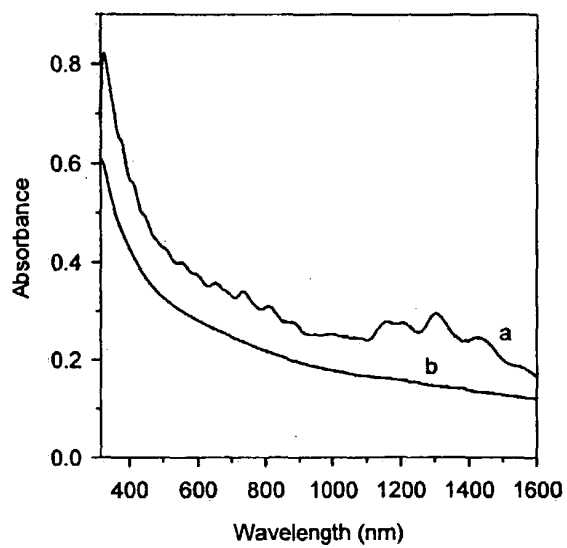


Figure 4

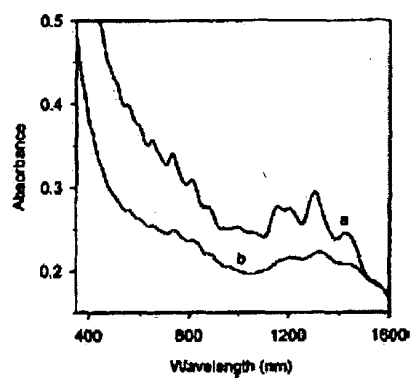


Figure 5

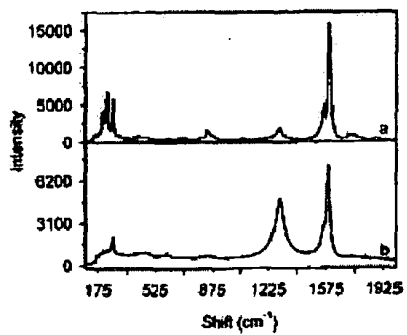


Figure 6

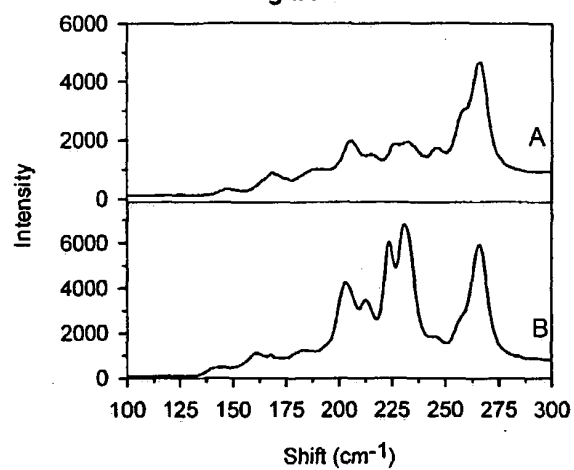


Figure 7

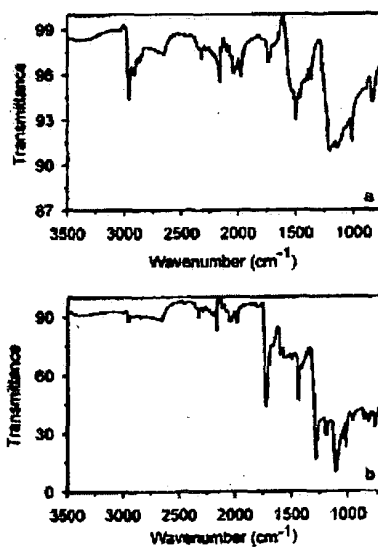


Figure 8

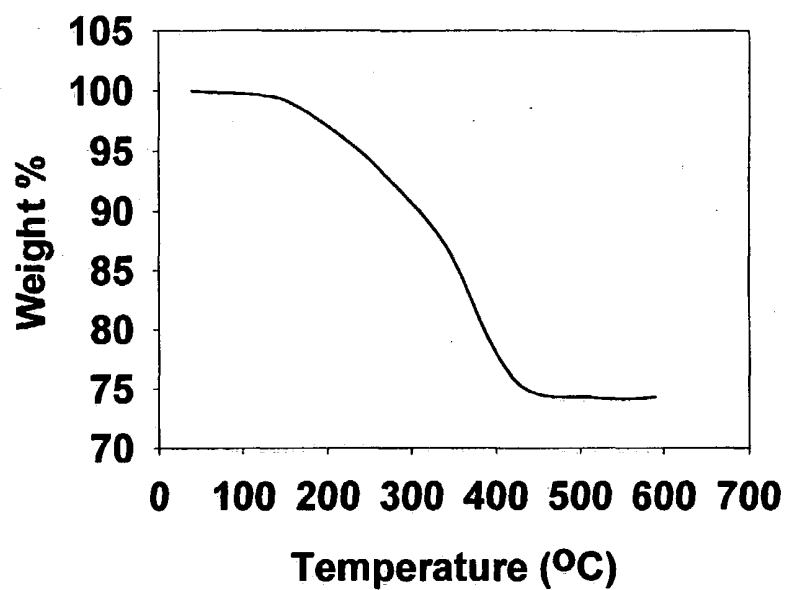


Figure 9

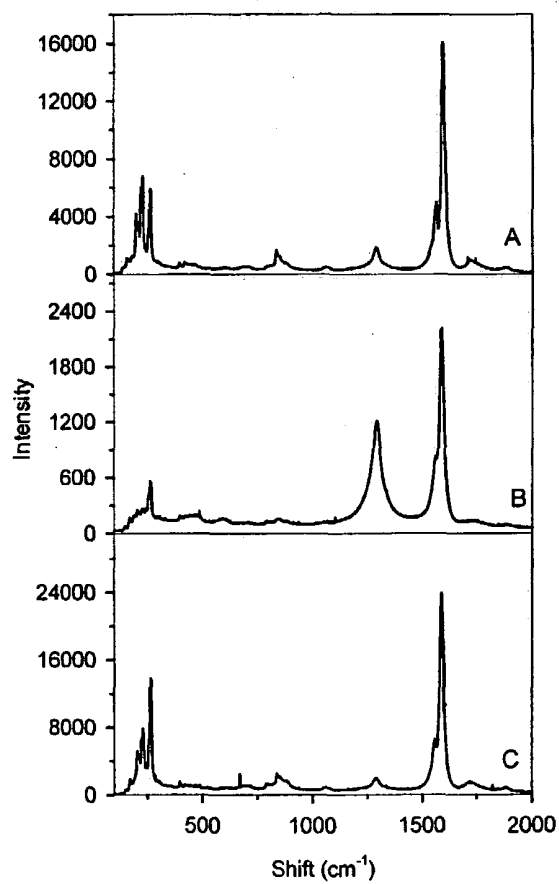
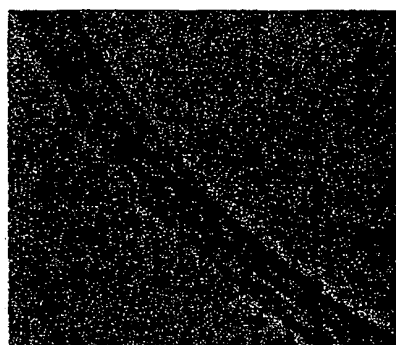
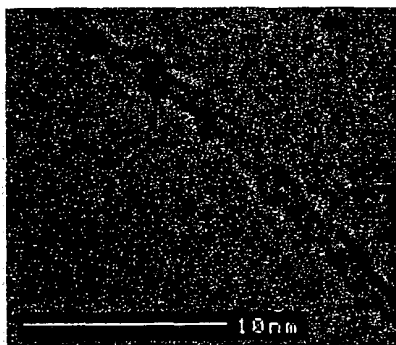


Figure 10

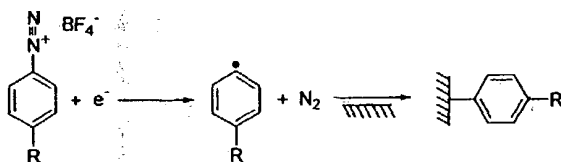




A



B

Figure 11



SWNT +   $\xrightarrow[\text{CH}_3\text{CN, 2:1}]{\text{1,2-dichlorobenzene}}$  

60 °C, 12 h


**21, R =** 

Figure 14

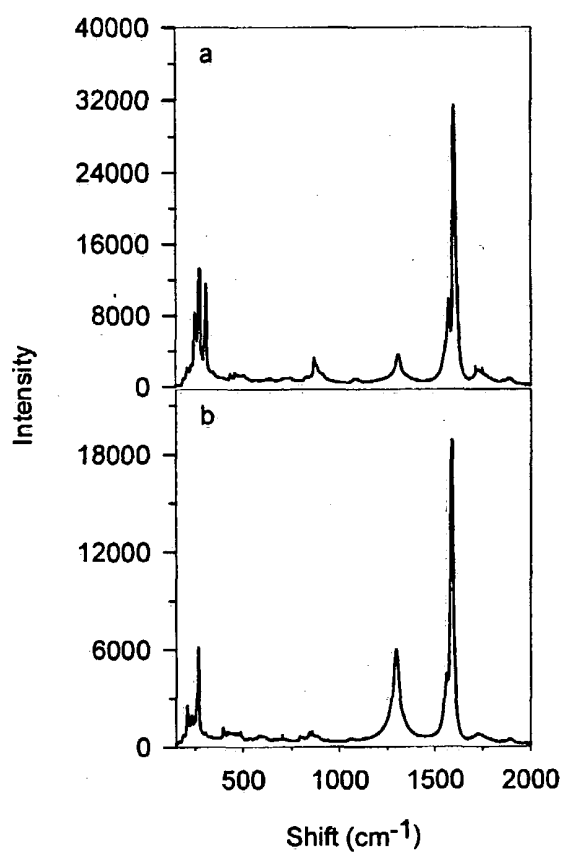


Figure 15

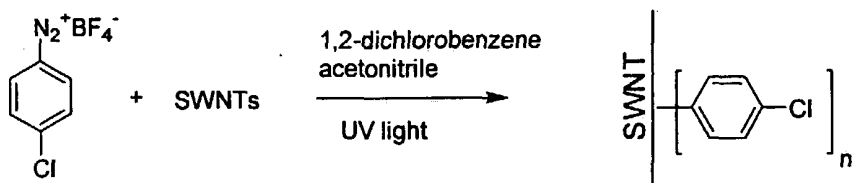




Figure 16

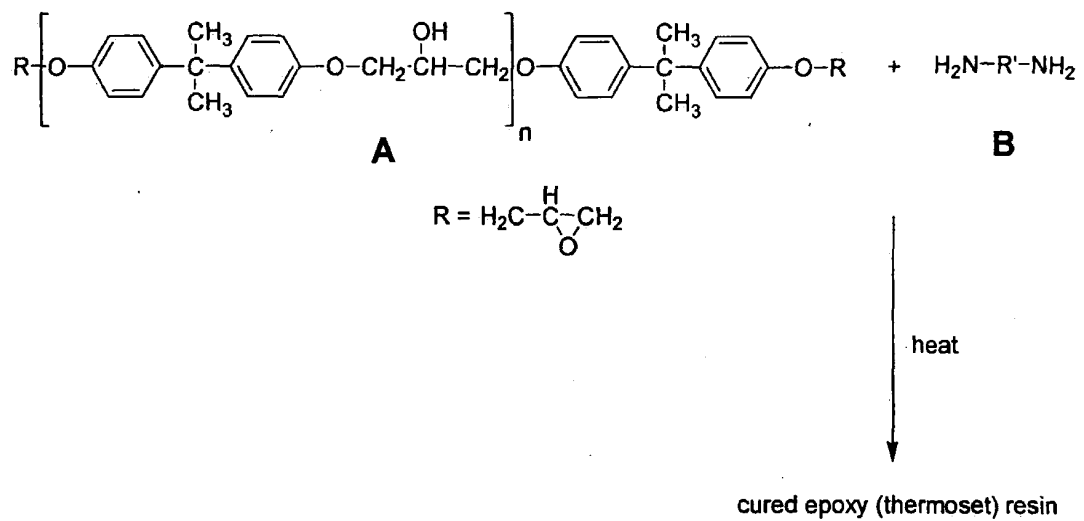
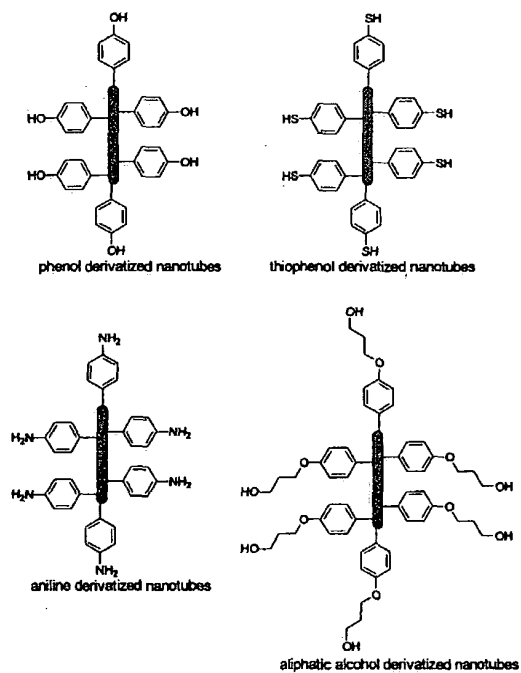
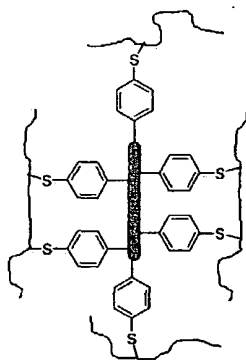


Figure 17



**Figure 18**



**Figure 19**

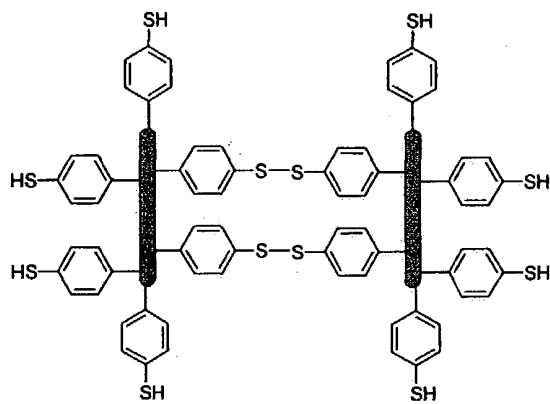
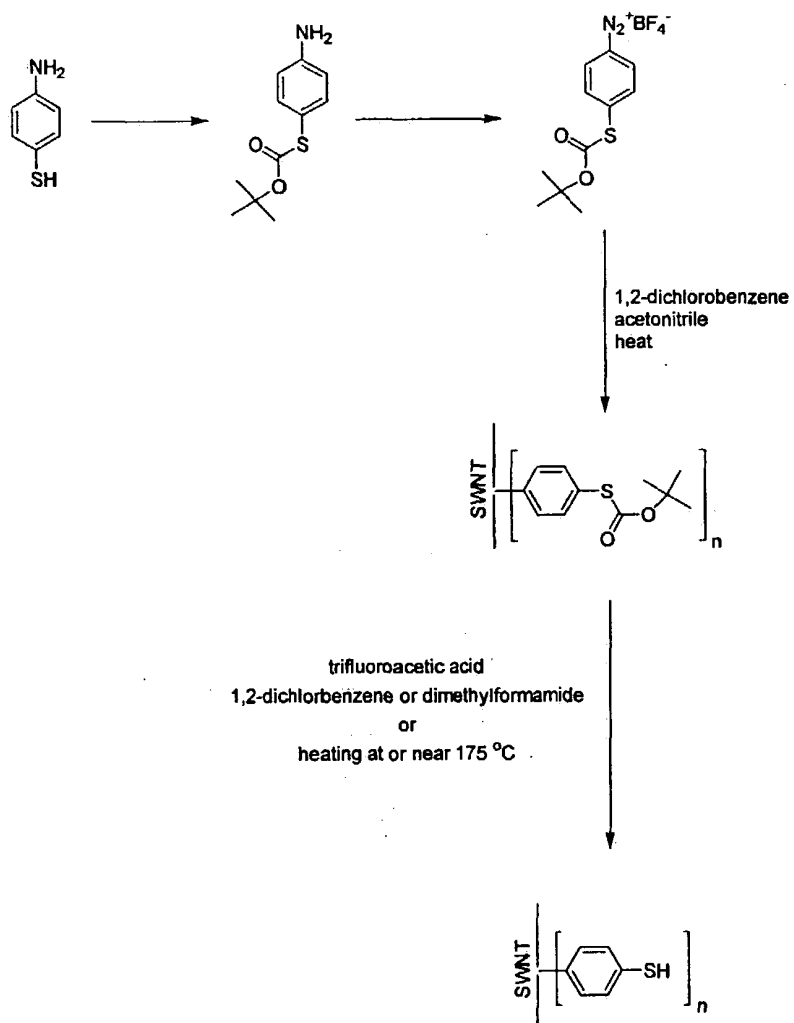
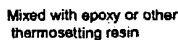


Figure 20

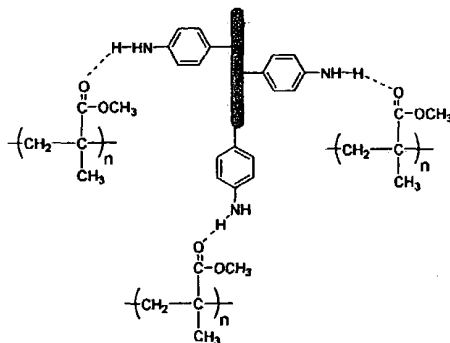


### Figure 21



**Cured thermoset resin in which the derivatized nanotubes act as a crosslinking agent by chemical reaction with the polymer matrix**

**Figure 22**

**Figure 23**